

South Dakota State University

## Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange

---

Electronic Theses and Dissertations

---

1975

### Economic Analysis of the Management of Idle County Funds in South Dakota

Wanda M. Leonard

Follow this and additional works at: <https://openprairie.sdstate.edu/etd>



Part of the [Economics Commons](#)

---

#### Recommended Citation

Leonard, Wanda M., "Economic Analysis of the Management of Idle County Funds in South Dakota" (1975). *Electronic Theses and Dissertations*. 5536.  
<https://openprairie.sdstate.edu/etd/5536>

This Thesis - Open Access is brought to you for free and open access by Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact [michael.biondo@sdstate.edu](mailto:michael.biondo@sdstate.edu).

ECONOMIC ANALYSIS OF THE MANAGEMENT OF  
IDLE COUNTY FUNDS IN SOUTH DAKOTA

by

Wanda M. Leonard

A thesis submitted  
in partial fulfillment of the requirements for the  
degree Master of Science, Major in  
Economics, South Dakota  
State University

1975

SOUTH DAKOTA STATE UNIVERSITY LIBRARY

ECONOMIC ANALYSIS OF THE MANAGEMENT OF  
IDLE COUNTY FUNDS IN SOUTH DAKOTA

This thesis is approved as a creditable and independent investigation by a candidate for the degree, Master of Science, and is acceptable as meeting the thesis requirements for this degree. Acceptance of this thesis does not imply that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Thesis Advisor

Date

Major Advisor

Date

Head, Economics Department

Date

#### ACKNOWLEDGMENTS

I want to take this opportunity to say "thank-you" to all those who offered guidance and suggestions for the study. A special thank-you goes to Dr. William Kamps, who agreed to be my thesis advisor. Dr. Kamps spent many "late night" hours reading the manuscript. Somehow, Dr. Kamps found his way through my "self-taught typing," which often takes a very special person, with extreme patience. I want to thank Dr. Wallace Aanderud for his assistance, and his comic comments, which often brought me back from the dungeon and helped put a smile on my face. I want to thank Ms. Eileen Verley for her many hours of typing, and especially for venturing out during an early Fall blizzard in order that this thesis could be completed on time.

To say just "thank-you" doesn't seem like enough. Thank-you has become such a common, often unheard, expression. This became somewhat evident to me when my one-year-old daughter KayCee's first words were "ank-you." Bless her heart!! She heard old mom say it so often.

With the common "thank-you" in mind, I want to give a "great big special thank-you" to Bill, and a "very, very sincere thank-you" to Wally and Eileen.

One final thought comes to mind as I sit here at the conclusion of this thesis. I have often heard that the author, the advisor and the typist develop somewhat hostile feelings during the course of study, preparation and completion. If Bill or Eileen got upset with me, I never knew it. I always felt gratitude, respect and appreciation towards them. They shall always be very dear and special people to me.

WML



# TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	vi
LIST OF FIGURES . . . . .	vii
Chapter	
I. INTRODUCTION . . . . .	1
Statement of the Problem . . . . .	2
Objective. . . . .	3
Method of Study. . . . .	4
Review of Literature . . . . .	5
Summary of Chapters. . . . .	7
II. LEGAL REQUIREMENTS AND RESTRAINTS UPON THE USE OF IDLE COUNTY CASH BALANCES IN SOUTH DAKOTA . . . . .	9
Introduction . . . . .	9
State Laws Governing Investment of County Funds. . . . .	10
Federal Rules and Regulations. . . . .	21
Summary. . . . .	22
III. IDLE COUNTY FUNDS IN SOUTH DAKOTA: ANALYSIS OF A COMPARATIVELY WELL INVESTED COUNTY. . . . .	24
Analysis of the Study County's Financial Position . . . . .	25
Analysis of Funds. . . . .	26
Analysis of Other Counties in South Dakota . . . . .	39
Summary. . . . .	42
IV. INVESTMENT ALTERNATIVES AND POLICY CONSIDER- ATIONS FOR COUNTY GOVERNMENTS. . . . .	44

Introduction . . . . .	44
Types of Investments . . . . .	44
Short-Term Investments . . . . .	46
United States Treasury Bills . . . . .	47
Certificates of Indebtedness . . . . .	48
Federal Agency Issues . . . . .	48
Repurchase Agreements . . . . .	48
Certificates of Deposit . . . . .	51
Time Deposits . . . . .	52
Savings and Loan Association Shares . . . . .	52
Long-Term Investments . . . . .	52
United States Notes and Bonds . . . . .	52
Federal Land Bank and National Mortgage Association Securities . . . . .	53
State and Local Government Bonds . . . . .	53
Investment Policies and Considerations . . . . .	53
Investment Selection . . . . .	54
Relationships with the Banking Community and Local Economic Development . . . . .	56
Local Economic Development . . . . .	58
Summary . . . . .	62
V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS . . . . .	63
Summary . . . . .	63
Conclusions and Recommendations . . . . .	66
BIBLIOGRAPHY . . . . .	74

# LIST OF TABLES

Table	Page
III-A. Forgone Interest Earnings for Idle Funds of the Study County, 1971-1973. . . . .	38
IV-A. List of Investment Instruments. . . . .	49
IV-B. Yield on Three Hypothetical Securities. . . . .	54

# LIST OF FIGURES

Figure	Page
III-A Amount of Study County Funds Invested, 1971-1973 . . . . .	29
III-B Daily Idle Funds Balance of the Study County, 1971. . . . .	30
III-C Daily Idle Funds Balance of the Study County, 1972. . . . .	31
III-D Daily Idle Funds Balance of the Study County, 1973. . . . .	32
III-E Daily Idle Funds Balances of the Study County, 1971-1973 . . . . .	35

## CHAPTER I

### INTRODUCTION

County governments in the United States are often hard-pressed to raise the revenues necessary to keep abreast of the ever-broadening and intensifying demand for more governmental services. The investment of idle cash balances constitutes a significant potential revenue source which is often overlooked or at best frequently under-utilized. Cash balances in excess of immediate operating needs arise in a number of ways. Tax revenues are received on one or more tax due dates during the year, and following their receipt, funds on hand naturally exceed the amount needed for immediate expenditure. Bonds may be sold for financing capital construction and proceeds from the sale may not be needed for expenditure until later. These situations offer investment possibilities of a short-term nature.

Short-term investment of idle local government funds had not been widely considered until estimates of potential revenue from such funds were published by the Advisory Commission on Intergovernmental Relations (ACIR) in 1961 and again in 1965.<sup>1</sup> The ACIR estimated that \$50 million to \$100 million per year could be earned by county

---

<sup>1</sup>Advisory Commission on Intergovernmental Relations (ACIR), Investment of Idle Cash Balances by State and Local Governments, Report A-3 (Washington, D. C., 1961), p. 7; Investment of Idle Cash Balances by State and Local Governments, Supplement to Report A-3 (Washington, D. C., 1965), p. 10.

governments in the United States through investment of these funds. In an article published in 1968, J. Richard Aronson estimated the amount of foregone unearned income of all counties due to lack of investment to be between \$312 million and \$342 million for the United States.<sup>2</sup>

Of those counties responding to the 1961 ACIR questionnaire, approximately 20 percent of excess funds and idle balances were being invested. By 1965 the amounts invested had increased to approximately 65 percent.<sup>3</sup> An estimate of the percentage of idle county funds being invested in South Dakota was not available at the time this project was begun. During the time the study was in progress, a study was completed at the University of South Dakota. Data from that study reveal that idle cash balances for South Dakota counties ranged from a low of 3 percent to a high of 91 percent for the third quarter of 1973.<sup>4</sup>

#### STATEMENT OF THE PROBLEM

During consultation with the county used in this study, it was discovered that the lowest demand deposit drawing point for the county

---

<sup>2</sup>J. Richard Aronson, "The Idle Cash Balances of State and Local Governments--An Economic Problem of National Concern," Journal of Finance, XXIII:3 (June 1968), p. 506.

<sup>3</sup>ACIR (1965), op. cit., p. 12 and p. 15.

<sup>4</sup>Dan Crippen, "Managing County Money: The Cash Flow Problem," Public Affairs, No. 61 (Vermillion, South Dakota, 1975), p. 3; "Fiscal Analysis of County Government in South Dakota" (unpublished honors thesis, University of South Dakota, Vermillion, 1974).

between January 1, 1973 and December 30, 1973 was \$165 thousand. Personnel in another county<sup>5</sup> in the same district revealed that they had in their office a federal revenue sharing check in excess of \$40 thousand that was undeposited and had been so for a period of over one month.

The problem of idle funds and the potential revenue that is being foregone by South Dakota counties is even more evident when examined in light of a national study conducted by the Municipal Finance Officers Association of the United States and Canada. The Association revealed that cities and counties with populations under 10,000 could annually earn 22 percent of their average monthly disbursements by proper investment. Cities and counties with populations between 10,000 and 50,000 could annually earn 23.8 percent of their average monthly disbursements.<sup>6</sup>

#### OBJECTIVE

The foregoing leads one to conclude that there is a need for research in the area of county financial management to develop tools and strategies for use by South Dakota county commissioners, county treasurers, and/or county investment officers. Basic fundamentals and procedures need to be assembled in a concise, simplified manner, so that county governmental units which by their very nature do not

---

<sup>5</sup>County asked not to be identified.

<sup>6</sup>Municipal Finance Officers Association of the United States and Canada, Investment of Temporarily Idle Funds: A Survey (Chicago, Illinois: Special Bulletin I, 1971), p. 6.

have large fiscal staffs or a great amount of time to devote to the area of investment of idle funds, can maximize investment earnings through better cash management. The objective of this report is to compute the potential earnings of a small county in South Dakota, that by comparison to other counties in the state, is in a relatively good position with respect to the investment of idle cash funds. The assumption is that if a county with a relatively good investment program can earn additional income, the potential revenue for counties with a more modest investment program would be even greater.

#### METHOD OF STUDY

While conclusions of the report will be useful to counties across the state, the problem of this paper is limited to the potential income that could be earned by an individual South Dakota county.<sup>7</sup>

Revenues and disbursements for a three-year period, January 1, 1971 through December 31, 1973 will be examined. This will be accomplished by reviewing all warrants and disbursements as listed in the treasurer's warrant register and all revenues as indicated on the treasurer's daily balance sheet.

The next step will be to determine the pattern of cash flow into and out of the treasury and to analyze bank balances for a 3-year period, thereby indicating any repeated patterns and identifying any

---

<sup>7</sup>The study county will not be identified. Since the county is representative of smaller South Dakota counties, its name is not of significance. The method and conclusions of the study are felt to be relevant for many South Dakota counties.



peaks and low points in balances which can be considered "normal." Receipts will be broken down by major source and disbursements by major categories. This breakdown will allow the researcher to check the areas where large fluctuations occurred, to determine if receipts and/or disbursements are of a recurring nature or if the point in question is an unexpected event.

Receipts and disbursements data will be charted on a cumulative basis. Charting the data allows identification of seasonal fluctuations and allows ready comparisons over the three-year period for any given income or expenditure source.

Foregone revenue will be computed to determine the dollar amounts the county could have earned through a more intensive policy. The South Dakota Compiled Laws pertaining to county investment, bonds and securities purchases, deposits of funds, and depositories of public funds, together with Federal regulations as established by the Federal Reserve Board will be examined. Finally, investment alternatives and methods of adaptation will be examined.

#### REVIEW OF LITERATURE

The articles aforeto mentioned provide historical data and general trends for the United States. Suggestions for investment are not included, as the publications are intended to arouse interest through concrete historical data and projections.

One of the most valuable pieces of material dealing specifically with idle cash management is "Investment of Idle Funds by Local

Governments: A Primer,"<sup>8</sup> by John A. Jones and S. Kenneth Howard. The authors go beyond identifying the problem and offer procedures for establishing a cash management program.

Another valuable publication is "Treasury Cash Investment Management,"<sup>9</sup> by the League of California Cities. The pamphlet discusses the basic fundamentals of cash analysis and sets forth guidelines for the maximum productive investment of idle funds. It is primarily written to be of assistance to small and medium sized California cities; however, the fundamentals and procedures appear to be applicable to county governments in South Dakota.

During the time period this study was being completed, Dan Crippen, a graduate student at the University of South Dakota compiled a data bank<sup>10</sup> on revenues and expenditures of each county in South Dakota. The data bank could prove helpful to a South Dakota county establishing an investment program.

There is a lack of material concerned specifically with the problem dealt with in this study. The question of whether the counties and cities have the right to invest the idle funds is still in controversy. Until the issue is settled there will probably not be a

---

<sup>8</sup>John A. Jones and S. Kenneth Howard, Investment of Idle Funds by Local Governments: A Primer (Chicago: Municipal Finance Association, 1973), pp. 1-48.

<sup>9</sup>League of California Cities, Treasury Cash Investment Management (Berkley, California: League of California Cities, 1972), pp. 1-14.

<sup>10</sup>Crippen (1974), op. cit., 1-14.

great deal of literature available. Two articles discussing the pros and cons of investment of idle funds are "A Note on the Alternative Uses and Yields of Idle Public Funds,"<sup>11</sup> by L. Wayne Dobson and a "Comment" by Jerry Hollenhurst.<sup>12</sup> Both authors contend that the cost to the local bank of holding public time deposits is too great-- in fact, they contend that the cost is greater than the cost to the governmental unit of not investing. The debate is continued in an article by S. Kerry Cooper, "The Economics of Idle Public Funds Policies: A Reconsideration."<sup>13</sup> Cooper maintains that local governmental units have the obligation to see that idle funds are invested. He further believes that the monies should not be designated for investment in mutual institutions, as do Dobson and Hollenhurst, but rather that these monies should be put out at the best source of potential revenue.

#### SUMMARY OF CHAPTERS

Chapter II is a compilation of South Dakota laws and federal regulations pertaining to the deposit and investment of county governmental funds. Special attention is focused on ambiguous laws, as

---

<sup>11</sup>L. Wayne Dobson, "A Note on the Alternative Uses and Yields of Idle Public Funds," National Tax Journal, XXI (September 1968), pp. 304-313.

<sup>12</sup>Jerry Hollenhurst, "Alternative Uses and Yields of Idle Public Funds: Comment," National Tax Journal, XXII (December 1969), pp. 557-558.

<sup>13</sup>S. Kerry Cooper, "The Economics of Idle Public Funds Policies: A Reconsideration," National Tax Journal, XXV (March 1972), pp. 97-99.

well as those that appear to be conflicting in nature.

Chapter III examines the receipts and disbursements data of a single South Dakota county over a three-year period. All available funds are invested daily and the foregone interest at varying rates is computed.

Chapter IV identifies and describes the various monetary instruments available for the investment of county funds in South Dakota. Alternative investment policies are reviewed and discussed. The instruments are explained in detail so that only limited knowledge of the financial world is required to understand how better management of idle funds can be provided. Factors that determine the minimum balance necessary to compensate banks for their services will be considered.

Chapter V concludes the report. First, with a summary of the results and, second, with recommendations that would enable South Dakota county governmental units to increase revenues.

## CHAPTER II

### LEGAL REQUIREMENTS AND RESTRAINTS UPON THE USE OF IDLE COUNTY CASH BALANCES IN SOUTH DAKOTA

#### INTRODUCTION

Expenditures and receipts of governmental units differ markedly from those of private business. Private businesses, especially larger corporations, obtain receipts on an almost daily basis and expend large sums of money on stated dates, such as tax due dates and dividend dates. In anticipation of these known dates, corporations are able to invest the continuous inflow of money in short-term assets and thus increase firm earnings. In contrast, governmental units receive their funds predominately on stated dates and make expenditures on a fairly regular and continuous basis.

Local governments collect the bulk of their revenue from property taxes which are levied for a year and payable on one or more due dates. In South Dakota, the tax due dates are May 1 and November 1 of each year. The lumpiness of tax receipts causes excess funds to accumulate at or near the tax due date. As a result, county treasurers are confronted with a surplus of temporarily idle funds, most of which will be expended over the following six months when again the cycle repeats itself.

The problem is also different for local governments as compared to corporations because state laws and federal regulations limit the number of ways in which government treasurers can invest idle balances. Corporations are allowed to invest idle money in any number of ways.

Not only do they have access to all the means presently available to governmental units, they also have access to finance company commercial paper, stocks and bonds of various corporations, European-dollar accounts, or almost any type of investment in which they wish to engage.

There are four primary fundamentals that appear to underlie the investment of otherwise idle public funds. These are safety, liquidity, yield, and legality. The fundamental of legality encompasses the other required elements of safety, liquidity, and yield. Legal requirements both at the state and federal levels of government have been formed which seek to insure safety, liquidity, and yield. The legal requirements and restraints placed on public funds is the subject of this chapter. First, the fundamentals of public fund investment as provided by state statutes will be considered, followed by federal regulations as they pertain to these investments.

#### STATE LAWS GOVERNING INVESTMENT OF COUNTY FUNDS

State legislators have generally held the fundamentals of safety and liquidity foremost in the formation of state laws pertaining to county funds. Legislators, realizing the "people's money" must be safe and available when needed, have passed legislation designed to insure these results. To help insure safety, statutes have been adopted which require that the monies stay within the county in which they were obtained, and that only specified types of deposits and investments be permitted. To help insure liquidity, statutes have

been passed which not only specify the type of investment securities that may be purchased, but also the length of time said securities may be held.

State law requires the county treasurer to deposit, and further to keep on deposit, monies of the county. The law further stipulates that the funds are to be deposited in state or national banks within the county.<sup>1</sup> The only exceptions to the rule of keeping the monies within the county would be in a case where the amount of county funds exceeds 100 percent of the capital and surplus of a bank, or in a case where no bank exists within the county.<sup>2</sup> If one or the other of these two exceptions exist, the county treasurer can place the funds in other banks within the state, so long as the selected bank has an "approved and responsible financial standing."<sup>3</sup>

For several counties in South Dakota the exceptions noted above are not applicable, as only two counties are permitted to place funds outside the county due to the unavailability of a bank within their county. Ten counties are limited in choice to the one bank located in their county. Eighteen counties have a choice of two banks. The remainder of counties, 37 in number, have three or more banks available

---

<sup>1</sup>State of South Dakota, South Dakota Compiled Laws, (Indianapolis: The Allen Smith Company, 1974), Vol. 3, Title 7, Chapter 20, Section 1.

<sup>2</sup>Ibid., Title 7, Chapter 20, Section 10.

<sup>3</sup>Ibid.



to receive county funds.<sup>4</sup>

While it is common practice in South Dakota for the county to hold the majority of demand and time deposits in the bank located in the county seat community, the laws provide flexibility in selecting a bank to maintain county deposits, providing that more than one bank exists in the county. State law requires that banks make application to the county treasurers for the right to be the depository for the county funds.<sup>5</sup> If banks did not make these applications by April 1 of each year, it was the duty of the county treasurer, until 1972, to advertise for applications from banks both within and outside the county.<sup>6</sup> Several county treasurers attending the South Dakota County

---

<sup>4</sup>Federal Deposit Insurance Corporation, Summary of Deposits in All Commercial and Mutual Savings Banks (Washington, D. C., 1973), p. 64.

<sup>5</sup>State of South Dakota, op. cit., Title 7, Chapter 20, Section 1.

<sup>6</sup>Ibid., Title 7, Chapter 20, Section 2, repealed by SL 1972, Chapter 43, Section 5. The original law was written in 1917. The reasoning of the 1917 legislators is not known, but it is reasonable to assume that the law making application mandatory was written to provide counties the opportunity of earning the highest amount of interest on demand deposits available. It is interesting to note that prior to 1900, it was almost universal practice for treasurers to invest idle monies and retain earnings for personal use. After 1900 this practice was prohibited. It was followed by a regulation providing that the government units involved be paid interest on demand deposits. It was during this era that South Dakota passed the law requiring application by banks wishing to act as depositories for public funds. In 1935 the federal regulation was changed and federally insured commercial banks were and are precluded from paying interest on demand deposits. Advisory Commission on Governmental Relations, Supplement to Report A-3, op. cit., pp. 1-2.



Officials Convention Treasurers Workshop<sup>7</sup> said they were unaware of this law, and that the county commissioners had always told them which bank was to be the depository bank.

South Dakota State law requires that "All [county] moneys shall be deposited in such banks [as provided in Title 7, chapter 20, section 8 (7-20-8)] in demand deposits, savings accounts, or on time deposits, and any interest accrued from such deposits shall be credited to the respective funds so deposited. All such demand deposits shall be subject to payment when demanded. . . .and subject always to such regulations as are imposed by law."<sup>8</sup> This law originated in 1897 and has been referred to during several sessions of the legislature up to and including 1959. It is interesting to note that while South Dakota law permitted the deposit of funds in savings accounts, a federal regulation, namely Regulation Q, did not permit the deposit of county funds in passbook savings accounts until November 27, 1974.<sup>9</sup>

The state law referred to directly above (7-20-9) states that monies may be deposited in "demand deposits, savings accounts, or on time deposit." An Attorney General's Opinion in 1954 limits the type of time deposit by stating that "bank time certificates [are] not

---

<sup>7</sup>1975 South Dakota County Officials Convention, Holiday Inn, Aberdeen, South Dakota, September 19, 1975.

<sup>8</sup>State of South Dakota, op. cit., Title 7, Chapter 20, Section 9.

<sup>9</sup>Federal Reserve Bank, "Regulatory Changes," 1974 Annual Report (Chicago, Illinois: 1974), p. 6.

to be purchased with county funds."<sup>10</sup> An opinion in 1960 declared that "County registered warrants drawn on general funds [are] not proper investment for county surplus funds."<sup>11</sup>

In 1974 the South Dakota Legislature enacted legislation permitting savings in "Domestic savings and loan associations whether chartered by this state or the United States [as long as the savings and loan is] . . . insured by the Federal Savings and Loan Insurance Corporation, and the amount so invested in any one association shall not exceed the amount which is covered by such insurance."<sup>12</sup> The law further requires that said savings and loan association(s) be located within the county where the funds originated. For many counties in South Dakota, this law is not applicable. Only 16 of the 67 counties in South Dakota presently have a savings and loan association.<sup>13</sup>

The above laws are found within the statutes governing county governmental units. Laws pertaining to the banking industry are also applicable to county funds and generally tend to make the law much broader in interpretation. Public funds, as defined within the banking statutes, are "all general, special, or other funds regardless

---

<sup>10</sup>State of South Dakota, op. cit., Title 7, Chapter 20, Section 9.

<sup>11</sup>Ibid., Attorney General Report 1959-60, p. 287.

<sup>12</sup>Ibid., Title 7, Chapter 20, Section 1.1.

<sup>13</sup>United States Savings and Loan Association League, Directory of Members (Chicago: United States Savings and Loan Association League, 1975), pp. 279-280.

of source or purpose held by any political subdivision of this state, including counties, municipalities, townships, school districts, or by any officer, commission, board, bureau, or agency of the political subdivision."<sup>14</sup>

The law reads on to say that "Any public funds which will not be needed for current operating expense, may be invested in securities of the United States and securities guaranteed by the United States government either directly or indirectly and redeemable within eighteen months from date of purchase. The maturity day may exceed eighteen months. Provided, however, that permanent, trust, retirement, and building funds may be invested in securities having a redeemable date beyond eighteen months."<sup>15</sup>

Attorney General opinions stemming from this section have stated that "County funds may be invested in farmers home administration investment programs"<sup>16</sup> and that "United States notes of more than eighteen months maturity [are] authorized to be purchased."<sup>17</sup> Concurring Attorney General opinions have declared that Health Education facilities authority bonds,<sup>18</sup> Housing and Redevelopment

---

<sup>14</sup>State of South Dakota, South Dakota Compiled Laws, 1967, op. cit., Vol. 2, Title 4, Chapter 5, Section 5.

<sup>15</sup>Ibid., Title 4, Chapter 5, Section 6.

<sup>16</sup>Ibid., Attorney General Report, 1967-68, p. 20.

<sup>17</sup>Ibid., Attorney General Report, Opinion 72-65.

<sup>18</sup>Ibid., Attorney General Opinion, 1-16A-55.

commission bonds,<sup>19</sup> and Urban Renewal bonds<sup>20</sup> are proper investments for county funds.

This goes beyond "demand deposits, savings accounts, or on time deposit" found in statutes governing county's, namely 7-20-9, and is indeed much broader. If funds can be invested in Federal Home Administration securities, as well as the other securities indicated above, it seems reasonable to assume that all agency issues would be equally safe, liquid, and legal. The securities of the Federal Home Administration presumably fall within the legal bounds of this section as being "indirectly guaranteed by the United States government."

The requirement stated in a portion of the above law "redeemable within eighteen months from date of purchase" would include, although not explicitly stated, securities of maturities as short as one day. This liberal interpretation is necessary if county governments are to invest cash balances on a daily basis.

Another portion of the above law states that "Any public funds which will not be needed for current operating expense, may be invested." What is a "current operating expense" is not clear. A test case or an Attorney General opinion would be beneficial to clarify this part of the law. From an accounting definition, current operating expenses would be defined according to the accounting period. The question is whether counties are presumed to be operating on a calendar year

---

<sup>19</sup>Ibid., Attorney General Opinion, 11-7-102.

<sup>20</sup>Ibid., Attorney General Opinion, 11-8-74.

basis in which case they would need to maintain demand deposits sufficient to meet one years expenditures, or are counties operating on a monthly basis in which case only one months expenditures would need to be idle, or are counties operating on a daily basis in which case only the following days dollar amount of disbursements would need to be idle. Due to the lack of such clarification, it is assumed in this study that meeting current operating expenses would require only that obligations be met when due, be it one day or 365 days hence.

Monies held in sinking funds accounts by counties are also restricted by South Dakota Compiled Law. A portion of the law provides that:

Sinking funds maintained for the purpose of payment of outstanding bonds shall be lawfully deposited with lawful depositories or invested in registered warrants or bonds of any municipal or public corporation of the state of South Dakota, including those counties issuing such bonds, or bonds of any Federal Land Bank, or of the United States or bonds or securities of any kind issued by the state of South Dakota, and interest accrued shall go into the sinking fund account. Moneys in sinking funds shall be invested only in the above named securities as will become due and payable on or before the date when the bonds for payment of which sinking fund was created become due and payable, except bonds of the United States or of the state of South Dakota.<sup>21</sup>

This law is broad in investment possibilities; however, only bonds of the United States are included, which excludes other securities of the United States, and also since only the Federal Land Bank is cited, it necessarily precludes bonds or securities of other Federal

---

<sup>21</sup> State of South Dakota, op. cit., Vol. 3, Title 7, Chapter 24, Section 19.

agencies. The portion of law stating that sinking funds may "be invested in registered warrants or bonds. . . including those counties issuing such bonds" indicates that sinking fund monies may be invested in county bonds. Extended further it could include investment in county warrants of issuing counties. If this is the fact, then sinking fund monies may be invested in county warrants, whereas general funds of the county may not be according to the Attorney General's Opinion referred to earlier, namely Attorney General Report 1959-60.

Investment of public funds can only be made after proper resolution by the governing board of a county, municipality, township, or school district. The resolution is to state the policy to be followed by the treasurer.<sup>22</sup> This virtually leaves the investment policy to the discretion of each individual unit of government.

Since timing of expenditures or transfers of funds held by the county is crucial to any investment policy, the following laws and procedures should be encompassed in policy formation.

A statute governing county government (7-23-4) provides that on the first day of each month the county treasurer shall turn over to the county auditor all voucher's for disbursement made by him during the preceding month. The auditor charges the proper fund, and within ten days the auditor and treasurer compare their cashbook and ledger balances and the auditor shall immediately thereafter, on the

---

<sup>22</sup>Ibid., Vol 2, Title 4, Chapter 5, Section 8.

application of any township, city, town, or school treasurer deliver to such treasurer an order on the county treasurer for the amount due said township, city, town, or school district.<sup>23</sup> Another statute provides that "At the end of each month the county auditor and treasurer shall apportion to the state, county, township, city, town, or school district the tax receipts for that month."<sup>24</sup>

These two sections allow the county to use the funds from the date of collection to at least the tenth day of the following month or longer. These funds could be put to use earning revenue for the county general fund; or new legislation could provide that the earnings be apportioned to the subdivision together with apportionment of the tax receipts.

Another practice which invites interest earnings is monies collected by the county which ultimately go to the State Treasurer. Fee monies, i. e., license plate fees and hunting fees, are collected by the county and later sent to the State Treasurer. At the end of each month the County Treasurer informs the State Treasurer of the amount collected and the State Treasurer sends a draft for the monies held by the county. Since this is a monthly occurrence, money collected at the beginning of any month is held by the county until at least the beginning of the next month. Examination of transferral dates suggests that the State Treasurer does not issue the drafts to the counties

---

<sup>23</sup>Ibid., Vol. 3, Title 7, Chapter 23, Section 4.

<sup>24</sup>Ibid., Vol. 4, Title 10, Chapter 17, Section 3.



immediately, but rather sends the draft(s) nearer the end of the month, usually between the twentieth and twenty-seventh day. Therefore, counties not only have the money for the initial month of receipt, but for almost all of the entire following month.

Combining the laws pertaining to banks and counties provides broader investment alternatives for public funds, while at the same time limits the depository location of such funds. The South Dakota Compiled Law, Title 4, Chapter 5, Section 9 (4-5-9) states that "All investment made pursuant to 4-5-5 to 4-5-8, inclusive may be deposited for safekeeping with any bank or trust company."<sup>25</sup> This conflicts with the requirement found in 7-20-1 that deposits remain within the county where the funds originated. Further 4-5-11 of the South Dakota Compiled Laws states that "Section 4-5-5 to 4-5-10, inclusive, are supplemental to any other laws relating to the investment, deposit or administration of the public funds therein specified, and shall supercede the provisions thereof only to the extent that such other laws may restrict or prohibit investment in accordance with the provisions thereof."<sup>26</sup> The statement "and shall supercede the provisions. . . with the provisions thereof" indicates that 4-5-6 prevails over 7-20-9, which provides wider investment alternatives, while at the same time 7-20-1 overrides section 4-5-9, therefore making deposits within the county mandatory, providing a bank exists in the county.

---

<sup>25</sup> Ibid., Vol. 2, Title 4, Chapter 5, Section 9.

<sup>26</sup> Ibid., Vol. 2, Title 4, Chapter 5, Section 11.



## FEDERAL RULES AND REGULATIONS

Federal Reserve regulations placed on member commercial banks indirectly influence public funds to the extent that interest rates are regulated and also to the extent that reserve requirements both on demand deposits and time deposits will influence compensating idle bank balances, the loaning capacity of banks, and, therefore, the local development of a particular community. Compensating idle bank balances, loaning capacity and local development are discussed in greater detail in Chapter IV.

As noted earlier in this section, federal regulations now permit public funds to be held in savings accounts. According to federal regulations, standard passbook savings deposits of governmental units cannot receive an interest rate higher than 5 percent. The rate ceiling applicable to time deposits of governmental bodies is 7.75 percent, the highest rate that may be paid on time deposits under \$100,000 by federally insured commercial banks, mutual savings banks, or savings and loan associations.<sup>27</sup>

The Federal Reserve Board determines the reserves that a member bank must maintain. This affects county government funds to the extent that reserve requirements would partially dictate the compensating bank balances that counties would need to maintain with the depository bank. Reserve requirements as provided by 1975 regulations are dependent upon the dollar values of net demand

---

<sup>27</sup>Federal Reserve Bank, loc. cit.

deposits and time deposits. Since no two banks in South Dakota are exactly alike, a reserve requirement applicable to all cannot be stated. The reserve requirements for time deposits could range from three percent to six percent, and for demand deposits from 7.5 percent to 13 percent.<sup>28</sup>

#### SUMMARY

Unlike private businesses, who have access to any number of banking institutions and investment alternatives, governmental units are restricted both with regard to banking location and investment instruments. Even further, governmental units are limited with respect to the time period instruments may be held. The restrictions imposed by state laws seek to provide assurances of safety and liquidity. The legislators have provided statutes which require that county funds be kept on deposit with banks within the county and that investment be limited to time deposits of local banks or savings and loan association shares, if savings and loan associations exist within the county. Application of the banking statutes, as they apply to public funds, makes investment alternatives broader and allows for investment through agencies of the federal government.

Until legislation or Attorney General Opinions clarify the current ambiguities existing between county statutes and banking statutes, the following assumptions are made and applied in this paper.

---

<sup>28</sup>Federal Reserve Bulletin (Washington, D. C., September 1975), 61:9, p. A7.

- (1) Funds must be deposited in banks within the county providing such bank(s) exist;
- (2) funds may be held in demand deposits, savings and loan association shares, savings accounts, time deposits, and securities directly or indirectly guaranteed by the United States government;
- (3) invested funds (excluding permanent, trust, retirement, and building funds) must have maturities within 18 months, which is assumed to include periods as short as one day;
- (4) funds must be available to meet expenditures when due, be it one day or 365 days hence; and
- (5) funds derived from tax receipts must be apportioned at the end of each month and payable 10 days hence.

### CHAPTER III

#### IDLE COUNTY FUNDS IN SOUTH DAKOTA: ANALYSIS OF A COMPARATIVELY WELL INVESTED COUNTY

Eldon Stohr, the State Auditor in Pierre, has estimated that South Dakota county governments are annually foregoing potential revenue from idle cash balances of at least \$2 million.<sup>1</sup> In practice the amount may well exceed the estimate. It would depend to a large extent on the expertise of the person or persons managing the funds and the rate at which the funds are invested. Most counties in South Dakota are presently holding certificates of deposit and/or United States government bonds, but they are not investing short-term funds in active, interest bearing instruments.

The county selected for this study requested assistance in analyzing its investment practices and willingly provided data and information as requested by the researcher. The study county is in a relatively good investment position with respect to other counties in South Dakota for keeping idle funds invested.<sup>2</sup>

Even though the study county is in a good investment position, examination of the financial records of the county revealed that there is an added annual investment revenue potential of several thousand dollars. Based on this, it is reasonable to expect that several counties in South Dakota could be gaining even higher returns

---

<sup>1</sup>Eldon Stohr, telephone conversation, April 4, 1975.

<sup>2</sup>Crippen, op. cit., p. 3.

through idle balances investment. Following an examination of the study county, a survey of South Dakota counties is presented.

#### ANALYSIS OF THE STUDY COUNTY'S FINANCIAL POSITION

The study county, like other counties in South Dakota, depends heavily on real estate and personal property taxes, inheritance taxes, motor vehicle license fees, state allocations and federal revenue sharing money to finance county government operations. The revenue realized from these sources becomes the responsibility of the Board of County Commissioners with regard to expenditure allocations and the responsibility of the county treasurer with regard to funds deposit.

The county has five banks within its boundaries. The majority of the county funds are held in the bank located in the county seat. The outlying banks have a portion of the county funds held in demand deposits. When the demand deposits in the county seat bank become too large in the view of the treasurer, the funds are portioned out in equal amounts to the outlying banks. All certificates of deposit and United States government bonds are held by the county seat bank.

The data used in the study was obtained by examining the warrants register and the treasurer's daily balance statement for three years, 1971, 1972, and 1973. A three-year time span was used to reduce the possibility of selecting an atypical year. Each year's data amounted to 365 daily balance statements and a minimum of 2,175 disbursement receipts; when multiplied by 3, the material used in the

analysis became at times overwhelming. In addition, the disbursements were broken into 49 categorical expenditures, and receipts were recorded in seven areas. It was deemed necessary to keep the material categorized so that either irregular disbursement patterns or irregular receipt patterns could be identified and the increase or decrease in funds more readily explained.

Several problems developed in categorizing and arranging the material. Consistently, warrants issued at the beginning of the month were not entered in the warrants register on the date stated, but instead they were lumped together at the end of the month. In addition the disbursements were not recorded in the daily balance sheets as spent, but rather recorded at will. This made summary data collection from the records impossible. Each recorded transaction had to be dealt with individually in the study. The matter was further complicated by handwritten descriptions and numerical notations. Reading handwritten material was further complicated by numerous strikeouts, as all entries were recorded in raw form and corrected when necessary.

#### ANALYSIS OF FUNDS

Cash-flow was the first aspect examined. The data was studied to determine if revenues became available or disbursements were made on a recurring basis over the three-year period. Analyzing the data on a monthly basis revealed consistent patterns from year to year for the same months. Examples of consistency included: the same dollar amount sent monthly to the state mental institution for the thirty-six

month period; the same dollar amount issued quarterly for the county library for the two-year period it was budgeted; approximately the same amount was spent on snow removal during the months applicable; weed control and highway construction funds disbursements increased during the summer months; receipts from property tax revenue were greatest during the first quarter of each year with peaks occurring near both the first and second due dates; motor vehicle license fees began in the first month of each year and peaked during the last month of the license renewal period; other similarities existed in both the expenditures and receipts area. While inheritance taxes, for instance, did not occur at particular segments of the year, approximately the same dollar amount was obtained yearly. Likewise, disbursements to governmental sub-divisions followed the peaks in receipts as governmental disbursements were based on the amount of tax money actually received.

Another consistency that existed was the continued carryover of excess revenues. Excess revenues of \$640,000 were carried into the first year examined. These first year funds were held in demand deposits, certificates of deposit, and government bonds with 56 percent of the funds invested. All of the first year's surplus was carried into the second year examined. During the second year the investment policy was stepped-up and 74 percent of the excess funds were invested. During the third year, funds were invested in even greater amounts with 83 percent of the excess funds being invested. About one-sixth of the third year increase and carry-over of revenue to the

following year was attributed to the additional investment revenue yielded during the third year.

The increased investment pattern is shown in Figure III-A. The vertical axis of the graph is measured in increments of \$100,000 and the horizontal axis is time on a daily basis. By examining Figure III-A, it can be seen that invested revenues increased by 243 percent over the three-year study period. For example, in 1971 \$370,000 was invested for the entire year. During 1972 invested funds increased in increments of \$50,000 per month for the months of April, May, and June. The investments remained at \$520,000 until late in December, 1972 when an additional \$74,000 was added. The reason for the investment growth in 1972 is partially explained by a decrease in expenditures, leaving more idle funds available for investment and also by the new federal revenue sharing monies received by the county. The increased investment program continued into 1973. It began in the early months of the year, held steady during the summer months and reached an all time high of \$802,000 during November, 1973. The increased investment for 1973 can be partially explained by a decrease in the idle funds balance of \$105,000 and by \$157,000 in federal revenue sharing monies.

The consistent yearly patterns of receipts and disbursements is evidenced by Figures III-B, III-C, and III-D. The vertical axis on the graph is measured in increments of \$100,000, and the horizontal axis on a daily basis. The shaded area of the figures represents the extended time period over which additional revenues would have



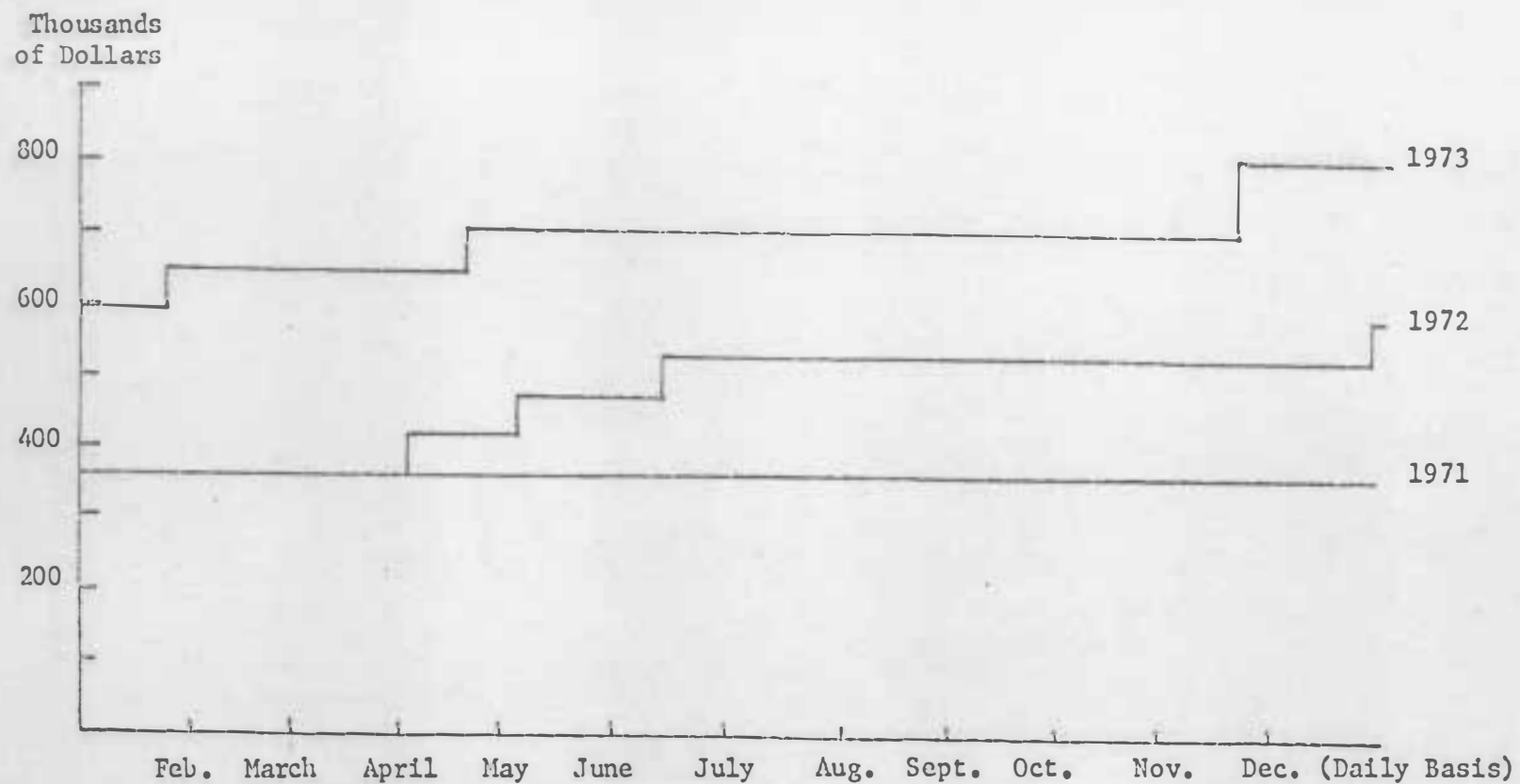


Figure III-A. Amount of Study County Funds Invested, 1971-1973

Thousands  
of Dollars

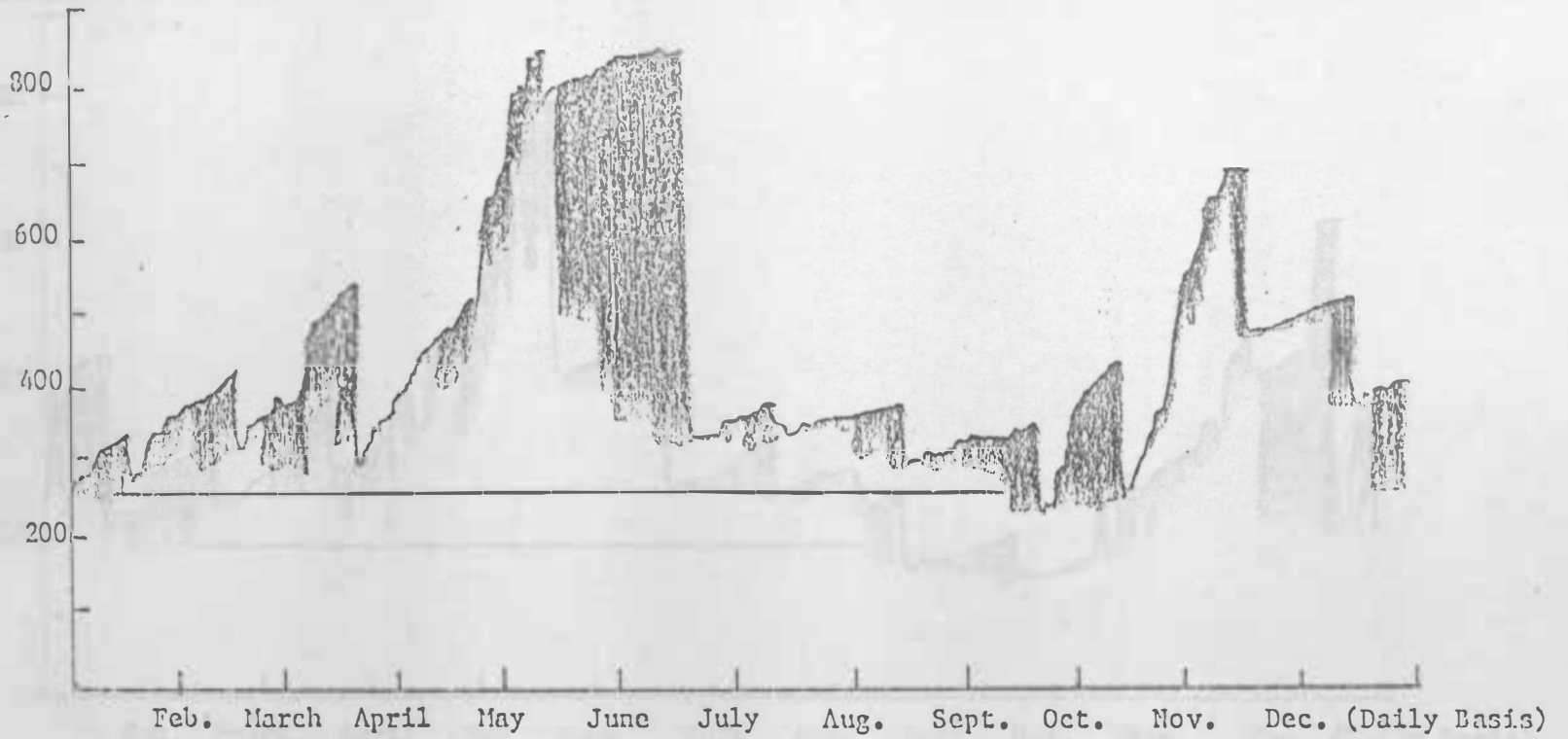


Figure III-B. Daily Idle Funds Balance of the Study County, 1971

Thousands  
of Dollars

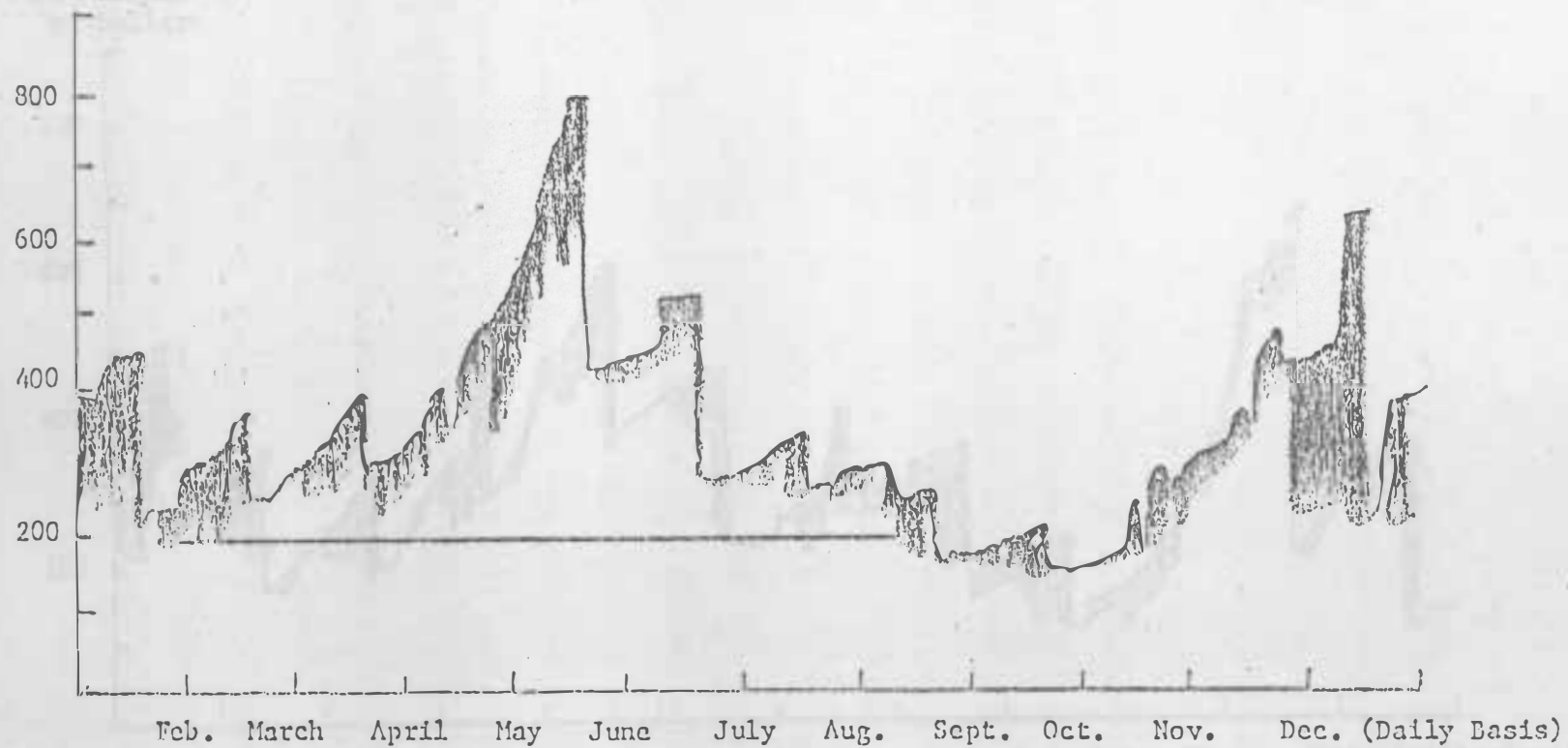


Figure III-C. Daily Idle Funds Balance of the Study County, 1972

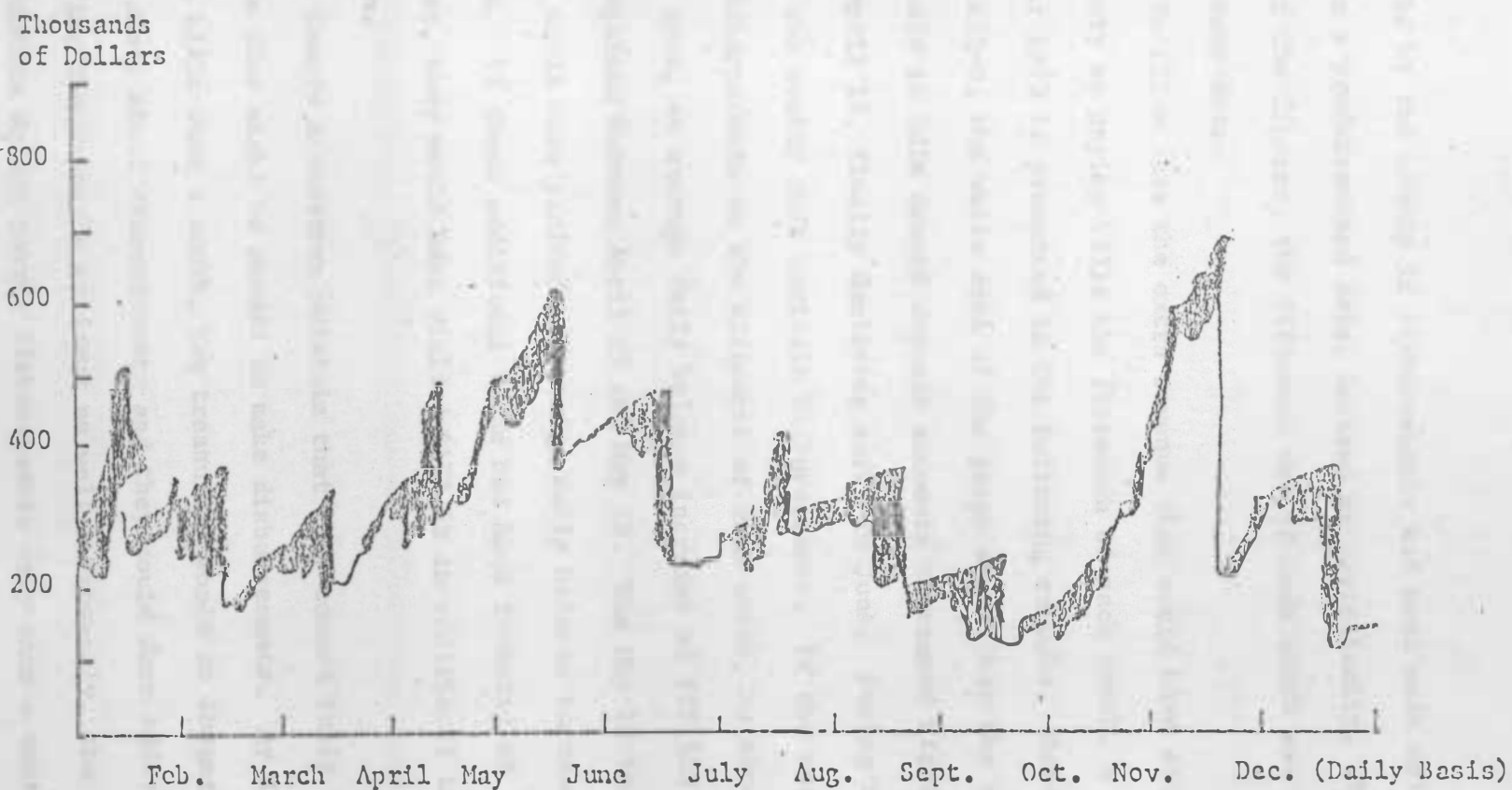


Figure III-D. Daily Idle Funds Balance of the Study County, 1973

been held by the county if disbursements had been made only once a month on a predetermined date, instead of periodically. For purposes of the figures, the fifteenth day of each month was chosen as the payment date.

To illustrate the extra revenue that could have accrued to the county by paying bills the fifteenth of each month, a segment of the year 1973 is presented in the following example. Referring to Figure III-D, the white area of the graph shows that the amount of funds held in idle demand deposit accounts increased significantly after April 15, finally declining early in June. During the two-month period the county made periodic disbursements. If the county had made disbursements on the fifteenth of each month, as shown by the shaded area, an average daily balance increase of \$17,559 could have been obtained between April 15 and May 15. The May 15 to June 15 period would have yielded an average daily balance increase of \$12,324. If these additional funds had been invested at 7 percent interest, they would have yielded \$177.63 in additional interest revenue.

County treasurers maintain that they cannot fully invest funds because they might be needed to make disbursements. By shifting to paying bills once a month, the treasurers would no longer have the uncertainty about disbursements and they could earn additional revenue for the county's citizens as well. Presently, the laws of South Dakota do not permit disbursements only once a month. Even if the laws are not changed to permit disbursements to be made only once

a month, there is still ample opportunity for counties to better utilize the investment potential of idle funds. County Commissioners must approve all disbursements before checks can be drawn. County Commissioners meet twice a month for the purpose of transacting business and approving disbursements. After approval, the warrants become eligible for payment. Since the Commissioners meet every two weeks the treasurer has at least 15 days before future expenditures must be made. If the checks were drawn for the amount of the warrants every two weeks, the treasurers would know that they had at least 15 days before other checks could be drawn and could invest funds for 15-day, 14-day, or 13-day periods as receipts accumulated.

When the three one-year graphs are superimposed (Figure III-E), it can readily be seen that the receipts and disbursements follow a similar pattern over the three years. Revenues decrease during the months between the tax due dates (May 1 and November 1), and it is during these months that approximately 50 percent of the funds are spent. The largest expenditure category for the county is road and bridge construction and highway and bridge reserve. Climatic conditions in South Dakota readily account for the concentration of this expenditure during the summer months.

Examination of the lowest as well as the highest demand deposit balances for the three-year study period revealed that the county experienced lows of \$242,000, \$171,000, and \$165,000 and highs of \$813,000, \$619,000, and \$717,000 for 1971, 1972, and 1973, respectively, allowing for the increase in time deposits occurring in 1972 and 1973.

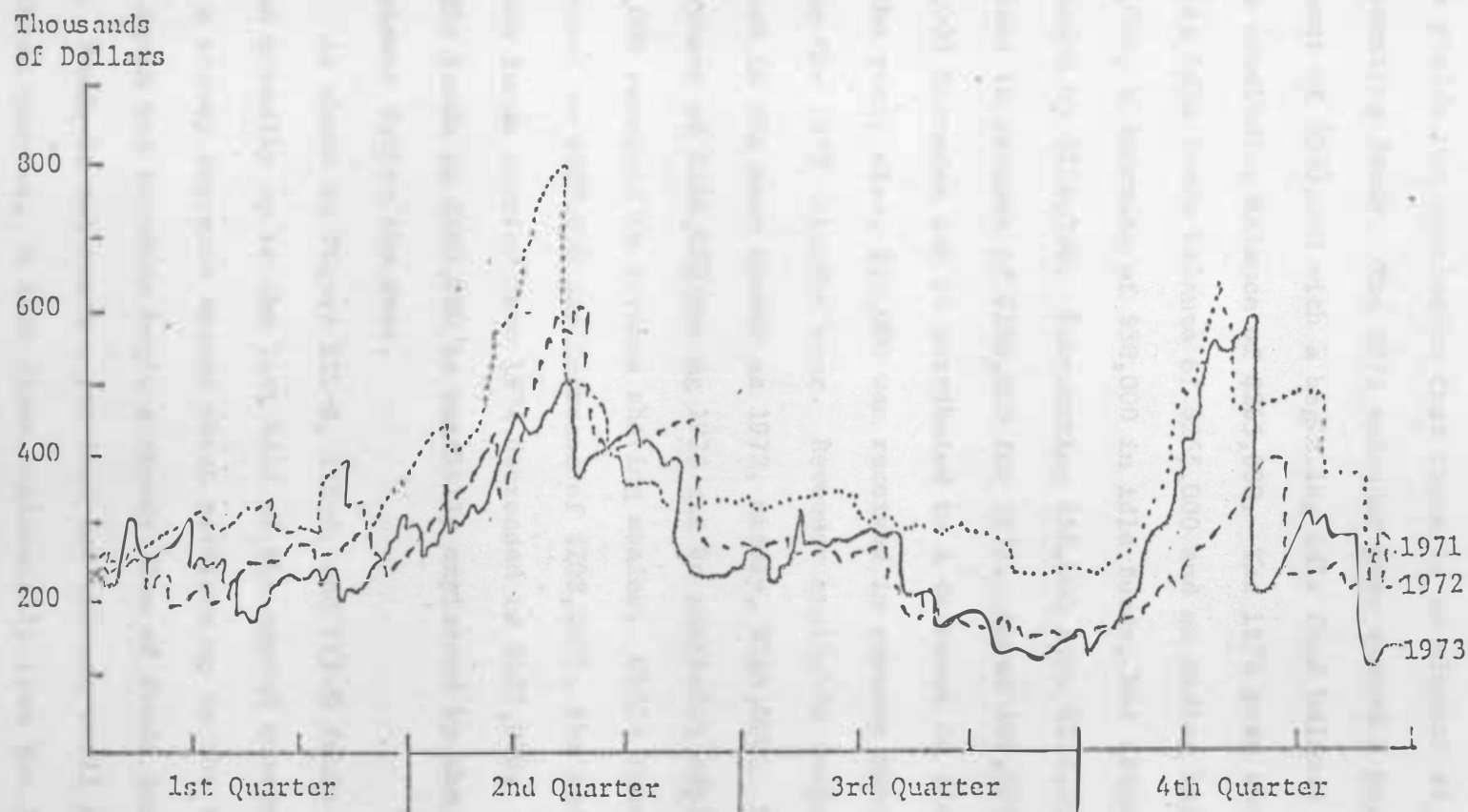


Figure III-E. Daily Idle Funds Balances of the Study County, 1971-1973

Further examination of the idle funds balances and invested funds yields the conclusion that there is an element of permanency in operating funds. The 1971 calendar year showed a permanent investment of \$370,000 with a beginning idle fund balance of \$270,000 and a concluding balance of \$265,000. The 1972 year showed a beginning idle funds balance of \$265,000 and an ending balance of \$207,000, a decrease of \$58,000 in idle funds, but invested funds increased by \$224,000. Subtracting \$58,000 from \$224,000, leaves an increase in revenue of \$166,000 for 1972. About \$90,000 of the \$166,000 increase can be attributed to a decrease in disbursements for the year; also, \$74,000 was received in revenue sharing monies during the 1972 calendar year. Revenues available during 1973 increased in the same amount as 1972, namely, \$166,000. The increase in revenue of \$166,000 during 1973 can be partially explained by \$157,000 received in revenue sharing monies. While investment was increased to \$802,000 (an increase of \$208,000), the ending idle balance funds carried into 1974 decreased to \$105,000. The decrease in idle funds to \$105,000 is partially explained by the increase in investment during the year.

As shown in Figure III-B, III-C, and III-D funds tend to increase steadily up to the last half of the second quarter, at which time a steady decrease ensues which persists up to the fourth quarter when again tax revenues begin a steady flow of funds into the treasury. Funds do not reach a previous low balance until sometime late in the third quarter. A line drawn horizontally from the lowest level



of the first quarter balance shows the continued amount that could have been invested, as well as, the length of time funds were available before any investment instrument would have needed to mature. This is portrayed in Figure III-B, III-C, and III-D. In 1971, the first incidence when an instrument would have needed to mature was mid-September. At that time idle funds go below the beginning balance, and investments would have needed to mature up to mid-October. For 1972, the first incidence was mid-August and continued up to mid-October. For 1973, the first incidence was mid-August and continued until mid-October.

The most practicable way to measure the efficiency of cash management is to measure total payments made against average cash holdings. This measure gives what is called the turnover rate of cash, that is, the number of times each dollar of cash is turned over in making payments during the year. The turnover rate was 2.36, 2.28, and 4.15, for 1971, 1972, and 1973, respectively. The study county could have increased its' turnover rate to 5.78 during 1973, if it would have invested an additional \$100,000 in a six-month short-term instrument in mid-February. The six-month investment would have matured in mid-August, providing an additional \$3,500, applying seven percent as the effective interest rate. Even with the additional investment of \$100,000, several thousand dollars would have remained idle, allowing for additional short-term investments in varying amounts and for various lengths of time.

To determine the actual foregone interest earnings for the

study county over the three-year period, the foregone revenues were computed for the actual days funds were available. The computations revealed that the study county could have earned several thousand dollars per year through full investment. Foregone interest earnings for idle balances were calculated daily for the three-year period at various interest rates. The amounts that could have been earned are shown in Table III-A. The amounts are in addition to the income resulting from the already invested funds in certificates of deposit and government bonds.

Table III-A. Foregone Interest Earnings for Idle Funds of the Study County, 1971-1973

Year Examined	Rate of Interest:					
	3.5%	4%	5%	6%	7%	8%
1971	\$13,376	\$15,324	\$19,250	\$23,213	\$27,215	\$31,256
1972	8,938	10,242	12,870	15,525	18,209	20,920
1973	16,585	18,999	23,770	33,724	38,726	38,726

For example, the county could have gained \$33,724 if idle funds had been invested daily at six percent during 1973. While the amount may seem trivial in comparison to the total dollar amount received and disbursed by the county government, it is interesting to note that the \$33,724 would have met the yearly salary and expenses for two to three regularly employed county officials; or the expenditures for

the poor, the mentally handicapped, health, and civil defense; or could have met all the miscellaneous expenditures, which include, but are not limited to, Memorial Day expense, county fair expense, insect control, audit expense, zoning and planning expense, parks, historical sites upkeep, weather modification, telephone, postage, machine necessities, and fire fighting.

Also recall that the study county ranks in the top 15 percent of counties in South Dakota as to the amount of idle funds invested. Other counties of equivalent size but with less adequate investment programs could conceivably meet many of their present or future expenditures through revenues gained by investment of idle funds.

#### ANALYSIS OF OTHER COUNTIES IN SOUTH DAKOTA

There are 159 banks in South Dakota;<sup>3</sup> however, as would be expected, the banks are not divided equally among the counties. Some counties do not have banks located within their boundaries, while other counties have several banks. Those counties having only one bank generally hold the entire amount of their county funds in that bank; even counties that have more than one bank generally hold a large portion of their funds in the county seat bank. The dictates of the depositor bank are then thrust upon the county's idle funds.

For the most part, the problem is not alleviated in counties which have more than one bank. The county treasurers are not trained

---

<sup>3</sup>Federal Deposit Insurance Corporation, op. cit., p. 64.

in investment management nor do they believe they have time to become involved in idle funds investment. Some treasurers maintained at an open discussion of a recent Treasurer's Workshop<sup>4</sup> that they did not have time to shop for interest rates, and furthermore did not believe that county treasurers should have the responsibility for investing idle funds. Other treasurers told how they shopped for interest by telephone. They said they called each banker, told him what they could get from another banker and asked him to make an offer. They said it often required less than ten minutes to place the calls and about as much time to receive the return calls and make the transaction. Still other treasurers told how they had attempted to increase the investment of their idle funds and that banks who had been initially willing to cooperate, had since informed them that the bank would not handle passbook savings for them after January 1, 1976. Still other treasurers voiced experiences with bankers in which the bankers had told them that they could invest in certificates of deposit, bonds, or other long-term instruments, but that there were no short-term instruments available to them.

On the surface it would appear that the situation should have improved when the Federal Reserve Board ruled in 1972 that county funds could be placed in insured savings and loan associations within the county.<sup>5</sup> While the new ruling was helpful, it in no way cured

---

<sup>4</sup>1975 South Dakota County Officials Convention, op. cit.

<sup>5</sup>Revenue Sharing Office, News Brief (U. S. Government Printing Office: Washington, D. C., 1973), No. 12, Col. 1, p. 1.

the problem of idle funds balances. Only 16 counties in South Dakota have savings and loan associations;<sup>6</sup> furthermore the deposits of a county are limited to a maximum of \$100,000 per savings and loan association.<sup>7</sup> One hundred thousand dollars, to several counties, is such a small amount of idle funds that while saving through shares in savings and loan associations is convenient for the most part, it does not alleviate the problem of excess funds.

A study conducted by personnel at the University of South Dakota during the same time period this study was in progress, revealed calculated data on idle funds for the counties in South Dakota.<sup>8</sup> The study showed that the percentage of non-earning cash for the third quarter of 1973 ranged from a low of three percent to a high of 91 percent for South Dakota. Some counties had an average of over \$1 million in idle funds.

Further, the data showed that only 16 counties (24 percent) were maintaining demand deposits balances at 25 percent or less of their excess funds balance. Another 32 banks (48 percent) were keeping between 25 and 50 percent of their funds uninvested. Eighteen counties (27 percent) were keeping over 50 percent of the excess funds uninvested. The counties that showed 80 to 91 percent non-earning cash balances were counties which did not have a bank located within

---

<sup>6</sup>United States Savings and Loan Association League, op. cit., pp. 279-280.

<sup>7</sup>Federal Reserve Bank, op. cit., p. 6.

<sup>8</sup>Crippen, op. cit., p. 3.

their boundary. Counties which had only one bank within the boundary tended to have 48 percent or more of such funds uninvested. Only those counties which had several banks within their boundaries tended to have fewer dollars in idle deposits.

#### SUMMARY

Current operating balances are expended in varying amounts at different times within weeks or within months. Receipts fluctuate with the passing of various tax collection dates and other regular sources of income. The varying dollar amounts expended and received make the determination of cash-flow appear to be a large overall problem when in fact it may not be. In the study county, yearly receipts tended to match expenditures to a great extent and resulted in a basic balance which persisted from year to year.

Data from the study county also revealed that some expenditure categories were larger in a certain season, but that other categorical expenses were lower during the same time period. Snow removal is a large expenditure during the winter months but during the same time period weed extermination and highway construction are virtually at a standstill.

By charting the data it became readily apparent that there is a draw-down on excess revenues during the months between tax due dates. With anticipation of higher expenditures than revenues during the summer months, counties could purchase investment instruments which would mature at varying times throughout the mid portion of the year.

A review of the data available on all counties in South Dakota showed that several counties are experiencing proportionately larger demand deposit balances than is the study county. One of the most obvious reasons for this is the number of counties which have only one bank within the county, and since the law stipulates that funds must be deposited within the county in which they were obtained, the counties are subject to the dictates of the single banker available.

## CHAPTER IV

### INVESTMENT ALTERNATIVES AND POLICY CONSIDERATIONS FOR COUNTY GOVERNMENTS

#### INTRODUCTION

Taxpayers can expect that a county will make maximum use of their money, and also that the county will take from the taxpayers only that amount which is necessary to finance the local government. In spite of this, excess revenues do accumulate. The problem of excess funds is further aggravated by the "lumpiness" of tax receipts.

A county has a number of alternatives available in the face of surplus treasury balances. At the one extreme, balances can be left idle with no attempt to capitalize on the funds. At the other extreme funds can be invested to the maximum amount. In Chapter III the latter alternative of maximum investment was employed.

Alternatives available in an investment policy are the subject matter of the major portion of this chapter. The discussion begins with an explanation of the money market and follows with an extended treatment of high-grade short-term and long-term instruments. Next comes a description of the investment planning process. Finally, the banking community is considered in regard to compensating bank balances or fee for service, followed by a discussion of the concerns and considerations of the local economy and the banking industry.

#### TYPES OF INVESTMENTS

The desirable cash flow is one in which cash expenditures meet cash receipts, with all excess cash being converted to interest earning



assets. The money market enables the person or persons charged with managing a unit's funds to purchase and sell high-grade securities. Securities available in the money market include short-term credit instruments such as Treasury Bills, commercial paper, banker's acceptances, negotiable certificates of deposit, loans to or repurchase agreements with securities dealers, and federal funds.<sup>1</sup> These securities are generally high-grade and allow an exceptionally high degree of safety. Most instruments are for periods of less than 90 days; but, some can have maturities of up to one year. On the secondary money market, instruments can be purchased for only a few days and even for as short a period as one day.

The money market is extremely broad, and unlike organized securities or commodities markets, it is as near to an investing unit as the "telephone."<sup>2</sup> Purchases or loans can usually be made through a local banker, who in turn places the requests with larger banks, dealers, or brokers who are in the heart of the financial community. Governmental units with voluminous amounts of idle funds may choose to deal directly with the larger units.

Investment instruments include both long-term and short-term obligations. Some of the investment opportunities would require specialized knowledge while others would require only limited knowledge

---

<sup>1</sup>Federal Reserve Bank of Richmond, Jimmie R. Monhollen, ed., Instruments of the Money Market (Richmond, Virginia: Federal Reserve Bank, 1970), 2d. ed., p. 4.

<sup>2</sup>Ibid., p. 5.

of the money market. Within the range of possibilities, unlimited combinations can be devised to meet the specialized needs of individual governmental units. In addition to knowledge of the money market, the investment officer must keep abreast of the changing state and federal regulations, and keep a working relationship with the banking community. The types of investments discussed in this chapter are currently within the legal framework of South Dakota laws governing county funds investment.

#### Short-Term Investments

Short-term instruments are those that mature in a relatively short period of time, or have an active secondary market in which they can be converted to cash almost immediately. The most widely used short-term instruments include: United States Treasury obligations, federal agency issues, state and local bonds, certificates of deposit, time deposits, and repurchase agreements.

The fact that nearly all county operating fund investments could be in short-term maturities is a key factor. There is ample opportunity to arrange the spacing of maturities in such a way that, after the first short period has passed, there is a regular schedule of maturing amounts extending several months into the future. This device can be utilized to keep any persistent basic balance invested while matching current receipts with current expenditures. In the case of the study county, short-term obligations could be purchased with maturity dates in the mid-year when receipts are not matching expenditures. When receipts do not match expenditures, a deficit could

be made up from any cash balance that was maintained, from investments maturing within a few days, or from investments sold on the secondary market.

United States Treasury Bills. These instruments are noninterest bearing. Rather a promise to pay a fixed amount on a specified future date determines the yield. The bills are purchased at discount and mature at full dollar value. To inhibit small investors, the bills are issued in denominations of \$10 thousand, \$100 thousand, \$500 thousand, and \$1 million. The time to maturity is 91 days to 365 days. Weekly auctions are held for those maturing in 91 days and 182 days. Monthly auctions are held for bills maturing in 270 and 365 days.

Treasury bills are backed by the United States government; therefore, there is practically no credit risk. Because treasury bills have a very active secondary market, they are not always available to one wishing to invest. Following the initial issue by the Treasury, dealers and dealer banks maintain the secondary market.

As previously stated, treasury bills are non-interest bearing. To compute the return per dollar for a one year bill, it is necessary to subtract the discount purchase price from the maturity value of \$1, divide by \$1 and multiply by 1 year (in days) over the number of days to maturity of the initial issue. If it should become necessary to convert bills to cash prior to maturity the return can be computed by: subtracting the number of days held from the number of days to maturity at initial auction, dividing by the number of days held and multiplying by the difference between the percentage return at purchase

and percentage return at sale. This amount is in addition to the percent return at purchase.

Certificates of Indebtedness. These are securities offered by the treasury at a fixed interest rate. They are for maturities of less than one year and are also backed by the United States government.

Federal Agency Issues. Some short-term instruments are available from federal agencies. The agencies which offer short-term obligations include: Federal Intermediate Credit Banks, Banks for Cooperatives, Federal Home Loan Banks, and the Federal National Mortgage Association. These are interest bearing instruments, but they provide no guarantee that principal and interest will be paid. Even without the guarantee, they are for all practical purposes risk free. The liquidity is excellent, as the secondary market is active. They also differ from bills in that they are not always issued on a regular basis. While some are issued regularly (see Table IV-A), most are issued when the agency needs funds to meet its' current needs.

Repurchase Agreements. For short-term investment, a repurchase agreement is one of the most flexible because it can be purchased at almost any time. As shown in Table IV-A, \$100 thousand is the minimum amount that is usually considered in repurchase agreements. Repurchase agreements, or "repros" as they are called in the market, are usually U. S. Treasury obligations.

The purchasing unit (the local government) agrees to purchase a repro on a certain day for a certain amount, as well as at a fixed

Table IV-A. List of Investment Instruments

Type	Issues and Maturities	Denominations	Restrictions	Marketability
Inactive Public Deposit <sup>1</sup>	Issued upon demand for 30 to 365 days as selected by purchaser.	No Minimum	Requires administrative burden of contractual agreements.	Has Secondary Market Potential
Repurchase Agreement <sup>2</sup>	Issued upon demand for 1 to 7 days under normal circumstances.	\$100,000 Minimum (Varies with some banks)	Yields generally below prevailing interest rates.	No Secondary Market
Federal Agency Issues:				
Banks for Cooperatives Debentures <sup>4</sup>	Issued most months for 180 days. Mature on first working day of month.	\$5,000 Minimum	Not legal obligations of or guaranteed by the Federal government.	Active Secondary Market
Federal Home Loan Bank Notes <sup>4</sup>	Issued irregularly with 8 to 10 maturities of less than 1 year.	\$5,000 Minimum	Not legal obligations of or guaranteed by the Federal government.	Active Secondary Market
Federal Intermediate Credit Bank Debentures <sup>4</sup>	Issued monthly, usually for a 9-month duration.	\$5,000 Minimum	Not legal obligations of or guaranteed by the Federal government.	Active Secondary Market
Federal Land Banks <sup>4</sup>	Issued irregularly for periods of a few months to 10 years.	\$1,000 Minimum	Not legal obligations of or guaranteed by the Federal government.	Active Secondary Market
FNMA and GNMA <sup>4</sup>	Issued about 4 times a year for periods of a few months to 8 years.	\$1,000 Minimum	Not legal obligations of or guaranteed by the Federal government.	Active Secondary Market
FNMA Short Term Notes <sup>3</sup>	Issued daily for 30 to 270 days, as selected by purchaser.	\$5,000 Minimum	Not legal obligations of or guaranteed by the Federal government.	Active Secondary Market

Table IV-A continued

Type	Issues and Maturities	Denominations	Restrictions	Marketability
Tennessee Valley Authority Notes <sup>3</sup>	Issued monthly for about 120 days.	\$5,000 Minimum	Not legal obligations of or guaranteed by the Federal government.	Active Secondary Market
U. S. Treasury Securities:				
Treasury Bills <sup>3</sup>	Issued weekly with maturities up to 1 year.	\$10,000 Minimum	Short issues not always available.	Broadest Second- ary Market of any Instrument
Treasury Notes <sup>5</sup>	Issued with maturities ranging from 1 to 7 years.	\$1,000 Minimum	Short issues not always available.	Active Secondary Market
Treasury Bonds <sup>5</sup>	Issued with maturities ranging from 5 to 30 years.	\$500 Minimum	Statutory limit of 4½% on coupon rate.	Active Secondary Market

<sup>1</sup>Interest is generally computed on a 365-day basis. Depositories may negotiate to use a 360-day basis.

<sup>2</sup>Interest is computed on a 360-day basis.

<sup>3</sup>Interest is computed on a 360-day discount basis.

<sup>4</sup>Interest is computed on a 360-day, 30-day month basis. Care should be taken to recompute on a basis of actual number of days invested to find true yield.

<sup>5</sup>Interest is computed on a 365-day basis.

SOURCE: League of California Cities, Treasury Cash Investment Management (Berkley, California: League of California Cities, 1972), p. 14.



interest return. At the same time, a bank agrees to repurchase the instrument on a specified day in the future. The interest earned is not always as high as the prevailing interest rate, the reason being that banks often offer a 1/2 to 1 percent lower rate than the Prevailing rate in compensation for handling the transaction. In addition, the bank has the ability to invest the funds for the specified time the repro is held.

Certificates of Deposit (CD's). CD's provide an opportunity for the governmental unit and the bank to cooperate in a way that is beneficial to both. Usually, CD's are for no less than 30 days, and more commonly they extend for longer periods of time. Both time period and interest rate are negotiated between the two parties to the agreement. Localities can contact banks in the area to see where the best discount can be obtained. CD's are not guaranteed, they are only as good as the credit and stability of the participating bank. Usually, the banks so involved are of such reputable character that CD's are considered high-grade securities. The only time a loss would likely occur is when the governmental unit under estimates its' future expenditures in regards to current receipts and has to terminate the agreement before maturity. A loss would occur upon termination if the present discount is below discount at purchase, or if the 30-day to 3-month interest that is sacrificed is greater than the discount at purchase or both. There is usually a secondary market ready to "pick-up" premature CD's.

Time Deposits. These instruments are very similar to CD's, except they do not have a secondary market. The interest rate is negotiable and usually depends on the period of time involved.

Savings and Loan Association Shares. Recent changes in federal regulations pertaining to savings and loan association shares now enable governmental units to use this form of investment. The maximum amount that can be so invested is limited to the amount insured by the Federal Deposit Insurance Corporation which is currently \$100 thousand per account. The yield on this type of investment is usually not as great as can be earned on others, but there is the element of "keeping the money at home" which may be appealing to local governments. Also, the money "kept at home" may enable more local people to finance new home purchase thereby increasing the property tax base.

#### Long-Term Investments

Long-term investments are not applicable to most funds discussed here, although the secondary market for long-term securities may provide attractive short-term investments. Those counties holding certificates of deposit in large amounts could benefit by conversion to long-term securities, in some cases, if the money held in certificates of deposit is not budgeted for "near-future" expenditures.

United States Notes and Bonds. These securities are often of such lengthy time periods that they are not a likely instrument to consider; however, short-term United States notes and/or bonds are



sometimes available on the secondary market. These obligations carry a fixed interest rate and fixed maturity.

Federal Land Bank and National Mortgage Association Securities.

These instruments are like other agency issues with the exception of maturity. The minimum maturity is usually one year with a maximum of ten years. These agency issues have a very active secondary market. The instruments are not legal obligations of or guaranteed by the Federal government; however, they are still considered very high-grade obligations.

State and Local Government Bonds. While these bonds are excellent investments for the wealthy, they are not a good alternative for a local government. The reason is that the interest return is low and governments pay neither the federal personal or corporate income tax. The investments are attractive to wealthy individuals and corporations since the interest income from such securities is excluded from the federal taxes.

INVESTMENT POLICIES AND CONSIDERATIONS

In the broadest sense, an investment policy includes every use of available funds. An investment policy can provide for maximum investment, partial investment, or zero investment. This section will discuss the methods of instrument selection for maximum to partial investment. The following section will present the economic arguments for and against zero to near zero investment of idle public funds.

### Investment Selection

In investing surpluses, the investment officer must closely examine the instruments available and calculate the anticipated returns. By keeping abreast of actions in both the primary and secondary market, the officer may terminate instruments in advance, if earnings can be increased. One-half percent interest could mean a gain or loss of \$500 per \$100,000 per year.

Table IV-B. Yield on Three Hypothetical Securities

Example	Par	Premium	Discount
Interest Rate	4%	4%	4%
Principal Amount	\$1000	\$1000	\$1000
Premium or Discount	\$ 0	\$ 5	\$ 5
Cost to Investor	\$1000	\$1005	\$ 995
Interest Received (Annual)	\$ 40	\$ 40	\$ 40
Adjustment of Premium or Discount	\$ 0	\$ -5	\$ +5
Net Income to Investor	\$ 40	\$ 35	\$ 45
Yield	4%	3.5%	4.5%

SOURCE: John A. Jones and S. Kenneth Howard, Investment of Idle Funds by Local Governments: A Primer (Chicago, Illinois: Municipal Finance Officers Association, 1973), p. 14.

Table IV-B reflects the varying returns depending on whether the type of security is purchased at par, at premium, or discount. The hypothetical examples in the table are based upon investments being held to maturity, which in this case is one year. Also the yield has been rounded to the nearest one-tenth of a percentage point.

It can be seen that even though stated interest rate and principal amounts are the same in all three situations, the true yield or net income to the investor can be altered considerably depending on the purchase arrangements.

In addition to computing the yield on securities at par, premium, and discount, the investment officer must keep abreast of changes in the market and be ready to alter the investment portfolio. Assume that a 180-day treasury bill had been purchased at a discount of 5 percent (\$5 per \$100). At the end of 90 days, straight line amortization would produce a discount of one-half the original discount or 2.5 percent. However, if market conditions are active and there is a high demand for the premature bills, the discount could be less, say 1.75 percent. Selling the bill at 1.75 percent would yield an additional 75 cents per hundred dollars over what was anticipated on straight line amortization. Faced with the above market, the investment officer would need to determine whether to hold the security or sell and reinvest the proceeds at an interest rate comparable with the original purchase. Instruments bought at discount could be held to maturity, or they could be purchased at the largest discount with the intention of selling at lowest discount, or selling if funds were needed, or a combination of holding some to maturity and selling others prematurely.

Prior to the time enough money has been accumulated to purchase a treasury bill (\$10,000 minimum), the investment officer could place funds in CD's (if it would be 30 days or longer until \$10,000 was

accumulated), savings and loan shares or repurchase agreements. If \$1 thousand accumulated per day, from day one to day 10 funds could be invested in repurchase agreements all due on day 10, or funds could be placed in savings and loan shares with withdrawal available on day 10. After maturity of the CD or withdrawal on day 10, a treasury bill could be purchased from the secondary market or a new issue purchased.

#### RELATIONSHIPS WITH THE BANKING COMMUNITY AND LOCAL ECONOMIC DEVELOPMENT

For the investment officer to take full advantage of the prevailing market price and instruments available, a sound banking relationship must be maintained. Banks perform many services for county governments. These services are not unlike those performed for other depositors. Services include accepting and accounting for deposits, collection services, clearing services, and custodial services for securities. An investment officer is fully aware of the services provided by banks and a planned compensating balance may be a part of the investment plan. Compensating balances are planned idle demand deposits that are earning bank services which would otherwise have to be paid for in some way. The problem arises in determining just how large or small the compensating balance should be.

Many banks do periodic computations to analyze their checking accounts to determine the net profit or loss on the accounts. This enables the banks to determine the average loanable amount they maintain. In addition, some banks have assigned figures representing the

cost of servicing the accounts. The compensating balance would need to be determined by each locality. It would require the working together of the county investment officer and a local banking institution.

In addition to the compensating bank balance theory, a second relatively new method is available and is gaining wide acceptance. Specifically, the method involves paying banks for their services on a bid arrangement.<sup>3</sup> The governmental unit can either list the services it wishes to purchase or the banks can list the services it will provide: (1) for a flat fee, (2) for maintaining a stated number of dollars as the average daily balance, or (3) for maintaining a stated amount in demand deposits and additional services it can provide and at what price. If the bid arrangement is not satisfactory to the constituents, another method being advanced is to place all funds within a single bank and rotating banks annually.<sup>4</sup> The government units can maximize banking services in this way and also alleviate the problem of selecting one bank over another, as each bank would eventually have the opportunity of holding funds. Bidding for funds or alternating banks would not be adaptable to many counties in South Dakota because the law requires that the funds remain in the county of origin. If only one bank exists in the county, neither bidding or alternating is feasible.

It is possible that compensating balances would not have to be

---

<sup>3</sup>League of California Cities, op. cit., p. 11.

<sup>4</sup>Ibid.,

held or perhaps held in very small amounts. Whether compensating balances would need to be large or small depends to a great extent on the economic conditions of the local area and the nation as a whole. These conditions will be discussed in the following section.

#### Local Economic Development

If county governments were only concerned with obtaining maximum short-run profits they would merely have to determine the amount of money available for investment, the security with the highest yield for the length of time the funds were available for investment and proceed. There is the argument though, that counties have more responsibilities to consider than merely maximizing the return on idle funds. That is that counties must consider the effects that their decisions will have on the local economy.

The aggregate revenue of an area could be affected by governmental investments. Initially the county would earn revenue which can easily be calculated, it is the long-term effect of investment that must be reckoned with by investment officers. This long-term effect is the relationship between the deposit expansion multiplier and the income multiplier, and the tendency for the banks to loan their excess reserves. There is naturally, a close association between the tax receipts of a governmental unit and the level of aggregate income. It is therefore common that as aggregate income increases, tax receipts increase. It is with this idea in mind that the following considerations are discussed.

County governmental units according to law must place their funds in public depositories, namely banks within the county. The county seat bank(s) usually maintains the greatest amount of funds. A county with a single bank merely has a transfer of funds at tax receipt time in most cases. Ignoring the time involved in the check clearing process, the tax payment takes money from the taxpayers' "demand deposits" and places the funds in the county's "demand deposit." There is no real advantage to the bank or the governmental unit resulting from the transaction only a disadvantage to the taxpayers who have less disposable income, but when the county purchases goods and services with the money better services will be provided. If taxpayers take money from bank time deposits to pay taxes and the county in turn places funds in time deposits, the bank experiences no real advantage or disadvantage. The county, rather than the individual, has the advantage of interest income.

More likely than either of the simplified examples above, the taxpayers' funds are spread through several banks in the area and the county seat bank(s) gain in total deposits. As in the case of the study county, the county seat bank realizes an increase in demand deposits and time deposits until such time as the county treasurer elects to place a fraction of the money in outlying county bank demand deposits.

If banks were selected on a competitive basis rather than on the basis of the location of the county seat, some banks could experience a drain throughout the year while others could experience an



increase in total funds. If a county was to transfer its demand deposits into time deposits, the question is whether or not banks could benefit or lose by such an arrangement. Consideration of the effects on the banking community follows.

Deposits will become more expensive for banks because they now have to pay interest for funds that were formerly held as demand deposits. It would seem that the costs to banks have increased without providing any offsetting revenue; however, lower reserve requirements on time deposits serve to offset the added costs. The excess reserves can be used to acquire additional earning assets. Considering the banking system in the whole community, the excess reserves allow further increases in earning assets so that total deposits can expand. The amount of expansion is dependent upon the reserve requirement.

Banks can increase earnings through increased time deposits as well as reduced taxable income by the amount of interest paid to county governmental units; counties could gain through increased interest revenues; and taxpayers in the community by the increased loaning capacity of the banks.

The following argument is based on the assumption that banks are willing to loan money and more importantly that there are borrowers willing to take out loans. If the banks are unwilling to loan money, or if people are not seeking loans, then the banks cannot increase their revenues, but would rather have to pay interest to the county governmental units and consequently have to charge higher



interest rates to those who do borrow in order to break even. If the rates go up for those borrowing, the amount of borrowing activity would probably decrease even further and those who did borrow would be forced to pay even higher interest rates. Another possibility would be for the banks to charge higher service fees for all depositors.

The local economy should benefit by increased time deposit holdings. The local economy could perhaps feel a negative effect if the funds were withdrawn from the local banking community and placed in instruments outside the local area. That is, if it is assumed that funds are withdrawn from the local community and not returned. In the opinion of S. Kerry Cooper, "interregional mobility of capital in the U. S. is considerable."<sup>5</sup> Mr. Cooper cited examples whereby idle public funds are placed in U. S. securities which in turn flow back into the local economy. He suggests for example, that idle Texas funds if used to purchase U. S. securities, will enter the New York money market, in turn be held as reserves by New York banks, who in turn loan money to Texas based petroleum firms in Texas. He also suggests that idle funds placed in U. S. securities may well enter the Chicago securities exchange and through a similar process return to Texas to purchase livestock from Texas producers. The funds would thus return to Texas residents in the form of increased income.<sup>6</sup>

---

<sup>5</sup>Cooper, op. cit., p. 99.

<sup>6</sup>Ibid.

South Dakota's agriculturally based economy could conceivably benefit in a similar manner. South Dakota is abundant in raw agricultural goods which are shipped and processed outside the state by major industries.

#### SUMMARY

This chapter provided a description of the investment instruments which are within the legal bounds of county governmental units. Instruments that come within the laws are: those directly or indirectly guaranteed by the federal government, which include U. S. treasury bills, U. S. notes and bonds, certificates of indebtedness, and some federal agency issues; those guaranteed by the depository bank and the Federal Deposit Insurance Corporation, which include repurchase agreements, certificates of deposit, time deposits, and savings and loan association shares; and some instruments of the state and county. Instruments of state and local governments are not guaranteed; however, they are considered to be high-grade securities in most cases.

A good banking relationship is essential to a county's investment policy. The investment policy set forth by each individual county will be dependent on the banking instruments available, the investment services provided by the bank, the compensating bank balance requirements and the local economy. Each aspect of investment policy formation is dependent in part or in whole on the other elements of policy formation.

## CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### SUMMARY

County government treasurers face the dilemma of having enough readily accessible funds to meet current expenditures, and the provision of too ample a balance which means lost income to the county treasury and a resulting greater burden on the taxpayer. It has been estimated that revenue for all counties in the United States would be increased yearly by \$100 million or more through replacement of idle funds balances with short-term interest bearing instruments. The estimate of potential annual interest revenue to South Dakota county governments has been estimated at \$2 million or more.

This report relates to the investment of idle cash balances of county units of government and to facilities available to these units to allow them to utilize their cash balances for producing additional revenue. The report sets forth the essential legal requirements and policy considerations bearing upon this problem, and invites attention to the opportunity for increased revenues without raising taxes or increasing non-tax charges upon the public.

State statutes governing county funds tend to be more concerned with safety and liquidity. Over the years, legislators have provided laws which serve as protective devices with regard to county funds and further written legal requirements that have required the funds to be held in very liquid form. Further, state laws have generally held that county funds must be deposited within the county of origin.

State banking statutes provide broader investment diversification to county governmental units.

The county selected for examination in this report was in a good position, relative to other counties in South Dakota, with respect to investment of idle funds. The study county could, however, increase revenues through the use of short-term interest bearing instruments. Not unlike other counties in South Dakota, the study county experiences an excess of funds every six months at or near property tax due dates. Not only are excess funds a problem of many counties, the state laws limiting the depository location of these excess funds becomes a problem. For nearly one-fifth of the counties in South Dakota, the location requirement means that the dictates of a single bank will be placed upon the county government with respect to funds deposit. The study county, although fortunate in the number of depository banks available, depended largely upon the bank in the county seat for county funds investment and services.

The study county increased long-term investments over the 3-year period examined, but did not at any time hold short-term investments. The reason expressed for not holding short-term investments were (1) the funds might be needed to meet expenditures and (2) the local banker said there were no short-term instruments available to the county government. It is evident from the cash-flow pattern that funds were continually available and that the county need not fear the problem of funds not being available when needed. One can only speculate as to why the local banker stated that short-term interest bearing instruments were not available.

There are three excess funds investment alternatives available to county governments: maximum investment, partial investment, or no investment. The type of investment alternative chosen will be based in part on the other policy decisions made by the county.

A policy of maximum investment would require several considerations. First would be the determination of how many banks exist within the county. If there is only one, the county is subject under current laws to the dictates of that single bank. If the single bank is willing to take county funds for investment purposes, the bank can issue CD's or time deposit agreements. With virtually no competition, the bank can offer whatever interest rate it so desires, as long as it stays at or below the maximum level permitted by the Federal Reserve System. If the bank is willing to take county funds on an investment plan, a compensating balance may be deemed necessary.

The level of the compensating balance would be somewhat dependent on the local and national economy. If the bank maintained a high loan to deposit ratio, and there were many willing borrowers, the compensating balance might be minimal. If on the other hand the bank was not employing its' funds in local loans, either because it did not believe it to be desirable or because there were not any willing borrowers, the compensating balance might be set higher. If there are two or more banks within the county, the choice of a depository bank becomes broader. Competition for idle county funds should increase with more banks bidding for the funds. If however, the banks are unwilling to negotiate short-term instruments within the banking system,

there is always the alternative of placing the funds outside the bank in United States securities issues such as U. S. treasury bills, certificates of indebtedness, and U. S. notes and bonds, or federal agency issues. Savings and loan association shares would also be a possible source of investment for a maximum of \$100,000 if a savings and loan existed within the county.

A near zero to zero excess investment policy could be selected if the county was unable to get short-term bank instruments and either did not have the cooperation of the bank in obtaining outside instruments, or did not believe outside investments to be in the best interest of the county.

#### CONCLUSIONS AND RECOMMENDATIONS

Based upon the facts and considerations set forth in this report, the author strongly believes that the continuance of State legislative requirements and restrictions which preclude the deposit and investment, in a safe and prudent manner, of idle county governmental funds to be inconsistent with constructive state-local relations in general and also deprive local government units of potential revenue. The following recommendations suggest the areas needing attention in future study and legislative action.

There is a continuing debate over whether the banking industry can financially tolerate the conversion of public funds from demand deposits to time deposits and/or other securities. There are those who argue that the loaning capacity of an individual bank would be enhanced through increased time deposit holdings, and there are those

who believe that increased investment, particularly investment outside the banking industry, would cause interest rates on private and business loans to increase substantially. While it is the conclusion of the author that the local economy could be enhanced through increased investment, a firm commitment should not be made until research either substantiates or refutes the position. The remainder of the recommendations would hinge upon such determination.

It is recommended that: research be conducted to determine the dependence of the banking industry on idle public funds and particularly if increased investment would have any appreciable effect on interest rates and local development.

Many commercial banks offer specialized types of interest-bearing time deposits to attract surplus funds of governmental units. An obvious example is the certificate of deposit. Its broad use was made possible when the Board of Governors of the Federal Reserve System raised the permissible rate which commercial member banks could pay for various types of time deposits. Many commercial banks also offer specialized financial services for governmental units. If demand deposit balances are sufficient to offset the costs, such services as investment advice and electronic data processing of payrolls are offered free of charge or at very low prices. The key point is that banks are in business just like any other proprietor or manager, the only difference being that a banker's commodity is money. Price competition among banks is necessary if counties are to follow a maximizing investment policy.



It is recommended that: local governmental units be allowed to invest their funds in banks outside the county, if better services for smaller fees can be obtained elsewhere; and further, that each county or district prepare an estimated summary of the amounts of funds to be held in compensating balances and the amounts to be invested for the coming calendar year and publish such summary in South Dakota papers thereby allowing banks the right to bid on the governmental accounts.

Based upon the investments currently held by county governments and the statements made and discussions held at the South Dakota County Officials Convention, it appears to be common practice for counties to accept the dictates of the county seat bank. It is, therefore, absolutely vital that county treasurers, or county investment officers, be informed of the current state statutes pertaining to potential short-term instruments.

It is recommended that: training sessions be held to acquaint treasurers and/or county commissioners with laws pertaining to county governmental funds thereby increasing their ability to manage these funds and to negotiate with the banking industry.

Full-time personnel working in the area of investment for a district could make wider diversification possible, thereby allowing investment in more lucrative agreements. Inter-county transfer could



be facilitated through district centralization and compensating balances could be lowered.

It is recommended that: upon passage of appropriate legislation, county governmental units be permitted to combine investment procedures within each planning district in South Dakota.

County treasurers often express their major concern with regard to idle funds investment, of not having money available to meet expenditures. This problem could be relieved and investment procedures facilitated by a once-a-month pay out date. A once-a-month expenditure policy would provide a simple means of determining the maturity date needed on short-term instruments, and alleviate the concern of not having funds available when needed.

It is recommended that: present statutes pertaining to expenditure dates be repealed and be replaced with legislation permitting expenditures transactions to be dated and payable on a specified day each month.

An intensive, progressive investment program could produce situations in which current receipts are not fully matching current expenditures and also where instruments due in only a short period would lose considerable interest if converted prematurely. To take full advantage of the financial situation it may be necessary from time-to-time to borrow for short periods of time.

It is recommended that: State legislation be changed to permit counties to engage in short-term borrowing, not to exceed some specified number of days nor to exceed the amount planned for conversion within this given time period.

Interest earnings on cash balances could also enhance all county governmental units through the process of "inter-county" transfers. With an intensive investment program, it is likely that individual county fund cash requirements could show temporary needs at some time during the fiscal year. Under proper safeguards, these temporary cash requirements could be met from cash balances in other county funds. It would be paramount that these funds be advanced only for the period that the shortage exists, that the borrowing county could repay the advance from estimated revenues when required, that the cash advance be repaid promptly, and the transactions be fully recorded.

It is recommended that: State and local legislative bodies and administrative officials take action to permit and facilitate the transfer of funds within counties providing investment for some counties and effective cash management for others. Care should be taken to insure that such transfers are of such kind and duration as to not impair the credit of the loaning governmental unit.

It should be noted at this point that the investment of those

cash balances which are in excess of operating requirements is only one aspect of the general function of treasury management. The other possible area of county treasury management is in tax reduction and rescheduling of tax due dates. It is obvious that the county governmental units are taking more from some taxpayers than is necessary for efficient operation, or the permanent surplus would not accumulate. A rescheduling of tax due dates would enable the private sector to hold its' cash longer thereby allowing greater capital formation and interest income to private citizens.

It is recommended that: the personal property taxes in South Dakota be reduced to that amount and only that amount which is necessary for efficient government and/or secondly that there be a rescheduling of tax due dates to avoid any accumulated surpluses beyond a reasonable amount. (The new tax due dates and the reasonable amount to accumulate would require further study.)

A further means of reducing the tax burden, while still providing the county with necessary funds would be to pass legislation which would allow county governments to issue tax anticipation notes. Tax anticipation notes could be offered when invested funds were not to mature in time to meet current needs. Tax anticipation notes offered at low interest rates, would attract funds from those who are seeking securities exempt from the Federal income tax. If the county had a surplus of funds resulting from these issues they could invest

the funds in government securities or time deposits thus profiting by the higher yields they obtained from investments which are not tax exempt, but for which the county pays no federal income tax.

It is recommended that: counties be permitted to issue tax anticipation notes and that any surplus of funds from such issue be invested in securities offering higher yields than the securities issued by the county.

The states have a basic responsibility of assisting and strengthening local units of government. This responsibility includes professional and technical investment policy assistance which is essential to individual county units and/or district units.

It is recommended that: the State of South Dakota initiate a program of technical assistance to local units of government with respect to the investment of idle funds. This informational system would relate investment possibilities and explore special issues of U. S. securities specially designed to meet the needs of local units if and when they become available. A Toll-free number in Pierre would be sufficient to meet daily needs with weekly or bi-monthly written informational materials.

## BIBLIOGRAPHY

Advisory Committee on Intergovernmental Relations (ACIR). Investment of State and Local Government Funds by State and Local Governments. Report A-3. Washington, D. C., 1968.

Investment of State and Local Government Funds by State and Local Governments. Report A-3. Washington, D. C., 1968.

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

## BIBLIOGRAPHY

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

Advisory Committee on Intergovernmental Relations (ACIR). "The Investment of State and Local Government Funds by State and Local Governments," Journal of Finance, 23(1), 1968, pp. 1-10.

## BIBLIOGRAPHY

- Advisory Commission on Intergovernmental Relations (ACIR). Investment of Idle Cash Balances by State and Local Governments. Report A-3. Washington, D. C., 1961.
- \_\_\_\_\_. Investment of Idle Cash Balances by State and Local Governments. Supplement to Report A-3. Washington, D. C., 1965.
- Aronson, J. Richard. "The Idle Cash Balances of State and Local Governments--An Economic Problem of National Concern," Journal of Finance. XXIII, No. 3 (June 1968).
- Cooper, S. Kerry. "The Economics of Idle Public Funds Policies: A Reconsideration," National Tax Journal. XXV (March 1972).
- Crippen, Dan. "Fiscal Analysis of County Government in South Dakota." Honor's Thesis. Vermillion, 1974. Unpublished.
- \_\_\_\_\_. "Managing County Money: The Cash Flow Problem," Public Affairs. No. 61, Vermillion, 1975.
- Dobson, L. Wayne. "A Note on the Alternative Uses and Yields of Idle Public Funds," National Tax Journal. XXI (September 1968).
- Federal Deposit Insurance Corporation. Summary of Deposits in All Commercial And Mutual Savings Banks. Washington, D. C., 1973.
- Federal Reserve Bank. "Regulatory Changes," 1974 Annual Report. Chicago, 1974.
- Federal Reserve Bulletin. LXI, No. 9, Washington, D. C., 1975.
- Federal Reserve Bank of Richmond. Jimmie R. Monhollen, ed. Instruments of the Money Market. 2d. ed. Richmond, 1970.
- Hollenhurst, Jerry. "Alternative Uses and Yields of Idle Public Funds: Comment," National Tax Journal. XXII (December 1969).
- Jones, John A. and S. Kenneth Howard. Investment of Idle Funds by Local Governments: A Primer. Chicago: Municipal Finance Association, 1973.
- League of California Cities. Treasury Cash Investment Management. Berkley: League of California Cities, 1972.
- Municipal Finance Officers Association of the United States and Canada. Investment of Temporarily Idle Funds: A Survey. Special Bulletin I. Chicago, 1971.

Revenue Sharing Office. News Brief. No. 12. Washington, D. C., 1973.

South Dakota County Officials Convention. Aberdeen, 1975.

State of South Dakota. South Dakota Compiled Laws, 1967. Vols. II, III and IV. Indianapolis: The Allen Smith Company, 1974.

Stohr, Eldon. Telephone conversation. April 4, 1975.

United States Savings and Loan Association League. Directory of Members. Chicago: United States Savings and Loan Association League, 1975.